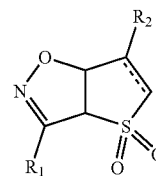




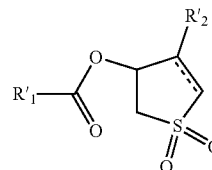
US 20210292338A1

(19) **United States**(12) **Patent Application Publication**
SEGER et al.(10) **Pub. No.: US 2021/0292338 A1**(43) **Pub. Date: Sep. 23, 2021**(54) **INHIBITORS OF ERK NUCLEAR
TRANSLOCATION**(52) **U.S. Cl.**CPC *C07D 498/04* (2013.01); *A61P 35/00*
(2018.01); *A61K 45/06* (2013.01)(71) Applicants: **Yeda Research and Development Co.
Ltd.**, Rehovot (IL); **Universitat de
Barcelona**, Barcelona (ES); **Institució
Catalana de Recerca i Estudis
Avançats**, Barcelona (ES)

(57)

ABSTRACTDescribed herein are compounds having Formula I or For-
mula II:(72) Inventors: **Rony SEGER**, Rehovot (IL); **Karen
FLORES**, Rehovot (IL); **Xavier
BARRIL ALONSO**, Barcelona (ES);
Carlos GALDEANO CANTADOR,
Barcelona (ES)(73) Assignees: **Yeda Research and Development Co.
Ltd.**, Rehovot (IL); **Universitat de
Barcelona**, Barcelona (ES); **Institució
Catalana de Recerca i Estudis
Avançats**, Barcelona (ES)(21) Appl. No.: **17/337,570**(22) Filed: **Jun. 3, 2021****Related U.S. Application Data**(63) Continuation of application No. PCT/IL2019/
051326, filed on Dec. 3, 2019.(60) Provisional application No. 62/774,360, filed on Dec.
3, 2018.**Publication Classification**(51) **Int. Cl.***C07D 498/04* (2006.01)*A61K 45/06* (2006.01)*A61P 35/00* (2006.01)

Formula I



Formula II

wherein each dashed line independently represents a satu-
rated or unsaturated bond; R_1 and R'_1 are aryl or heteroaryl
as defined herein; and R_2 and R'_2 are as defined herein.
Further described is a method of inhibiting nuclear translo-
cation of ERK1/2 in a cell, by contacting the cell with a
compound having Formula I or Formula II. The compounds
may also be for use in treating a disease or disorder
associated with nuclear translocation of ERK1/2.

Specification includes a Sequence Listing.**Z56 binding modes to ERK2**